

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) An antireflection film comprising:

a transparent support; and

a low-refractive index layer having a lower refractive index than the transparent support, wherein the low-refractive index layer is an outermost layer of the antireflection film, and the low-refractive index layer comprises: a hollow silica particle; and a compound lowering a surface free energy of the antireflection film,

wherein at least one of a silicone and a fluoroalkyl group is segregated at an outer surface of the low-refractive index layer such that a spectral intensity ratio Si/C or F/C in a photoelectron spectrum at the outer surface is larger by at least 5 times than that at a depth from the outer surface, the depth being equal to 80 % of a thickness of the low-refractive index layer.

2. (Original) The antireflection film as claimed in claim 1, wherein the compound is at least one selected from the group consisting of a silicone compound, a fluorine-containing compound and a fluoroalkylsilicone compound.

3. (Original) The antireflection film as claimed in claim 2, wherein the compound is the silicone compound.

4. (Previously Presented) The antireflection film as claimed in claim 1, wherein the low-refractive index layer comprises a binder, and the compound comprises a reactive group with the binder.

5. (Previously Presented) The antireflection film as claimed in claim 1, wherein the compound comprises a (meth)acryloyl group.

6. (Currently Amended) An antireflection film comprising:

a transparent support; and

a low-refractive index layer having a lower refractive index than the transparent support, wherein the low-refractive index layer is an outermost layer of the antireflection film, and the low-refractive index layer comprises: a hollow silica particle; and a binder capable of lowering a surface free energy of the antireflection film,

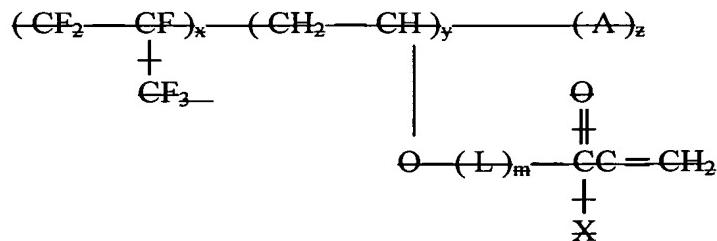
wherein at least one of a silicone and a fluoroalkyl group is segregated at an outer surface of the low-refractive index layer such that a spectral intensity ratio Si/C or F/C in a photoelectron spectrum at the outer surface is larger by at least 5 times than that at a depth from the outer surface, the depth being equal to 80 % of a thickness of the low-refractive index layer.

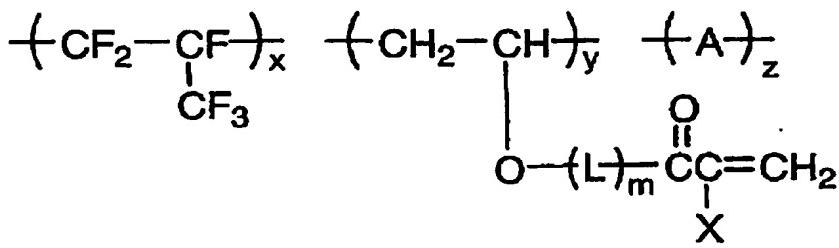
7. (Original) The antireflection film as claimed in claim 6, wherein the binder comprises at least one of a silicone and a fluorine.

8. (Previously Presented) The antireflection film as claimed in claim 6 or 7, wherein the binder is a fluorine-containing polymer.

9. (Previously Presented) The antireflection film as claimed in claim 6, wherein the binder is a compound having a (meth)acryloyl group.

10. (Currently Amended) The antireflection film as claimed in claim 6, wherein the binder is a compound represented by formula (1):





wherein L represents a linking group having from 1 to 10 carbon atoms; X represents a hydrogen atom or a methyl group; A represents a repetitive unit derived from a vinyl monomer; $2 < m < 10$; and x, y and z each indicates mol% of the respective repetitive unit, and satisfy $30 \leq x \leq 60$, $5 \leq y \leq 70$ and $0 \leq z \leq 65$.

11-12. (Cancelled)

13. (Previously Presented) The antireflection film as claimed in claim 1, which comprises a layer comprising at least one of a hydrolysate of an organosilane and a partial condensate of the organosilane, wherein the hydrolysate and the partial condensate is produced in the presence of at least one of an acid catalyst and a metal chelate compound, and the organosilane is represented by formula (A):



wherein R^{10} represents a substituted or unsubstituted alkyl group, or a substituted or unsubstituted aryl group; X represents a hydroxyl group or a hydrolyzable group; and m indicates an integer of 1 to 3.

14-29. (Canceled).

30. (Withdrawn) A polarizing plate comprising an antireflection film of claim 1.

31. (Withdrawn) A polarizing plate comprising:
a polarizing sheet; and
a transparent protective film on one side of the polarizing sheet, the transparent protective film comprising an antireflection film of claim 1.

32-39. (Canceled).

40. (Withdrawn) A method for producing a polarizing plate of claim 30, which comprises:

feeding a polymer film for a polarizing sheet;

holding each edge of the polymer film with a holding unit; and

stretching the polymer film by imparting a tension to the polymer film while moving the holding unit in a machine direction of the polymer film

wherein

the stretching is performed under a condition satisfying formula (III):

$$| L_2 - L_1 | > 0.4W$$

wherein L_1 indicates a locus of the first holding unit from a substantial holding start point to a substantial holding release point on one edge of the polymer film; L_2 indicates a locus of the second holding unit from a substantial holding start point to a substantial holding release point on the other edge of the polymer film; and W indicates a distance between two substantial holding release points of the first holding unit and the second holding unit, and

a speed difference of the moving between the first holding unit and the second holding unit is less than 1%.

41. (Withdrawn) The method for producing a polarizing plate as claimed in claim 40, wherein the stretching is performed under keeping a volatile content of the polymer film at least 5 % by volume, and the volatile content is decreased while the polymer film is shrunk.

42. (Withdrawn) The method for producing a polarizing plate as claimed in claim 40, which comprises sticking a transparent protective film to one side of the polarizing sheet, the protective film having-an antireflection film.

43. (Withdrawn) An image display device comprising an antireflection film of claim 1.

44. (Withdrawn) The image display device as claimed in claim 43, which is a liquid crystal display device.

45. (Withdrawn) The image display device as claimed in claim 43, which is a transmissive, reflective or semi-transmissive liquid crystal display of any mode of TN, STN, IPS, VA or OCB.

46-59. (Canceled).

60. (New) An antireflection film comprising:
a transparent support; and
a low-refractive index layer having a lower refractive index than the transparent support,
wherein the low-refractive index layer is an outermost layer of the antireflection film, and the low-refractive index layer comprises: a hollow silica particle; and a compound lowering a surface free energy of the antireflection film,
wherein the surface free energy is at most 25 mN/m.

61. (New) The antireflection film as claimed in claim 60, wherein the compound is at least one selected from the group consisting of a silicone compound, a fluorine-containing compound and a fluoroalkylsilicone compound.

62. (New) The antireflection film as claimed in claim 61, wherein the compound is the silicone compound.

63. (New) The antireflection film as claimed in claim 60, wherein the low-refractive index layer comprises a binder, and the compound comprises a reactive group with the binder.

64. (New) The antireflection film as claimed in claim 60, wherein the compound comprises a (meth)acryloyl group.

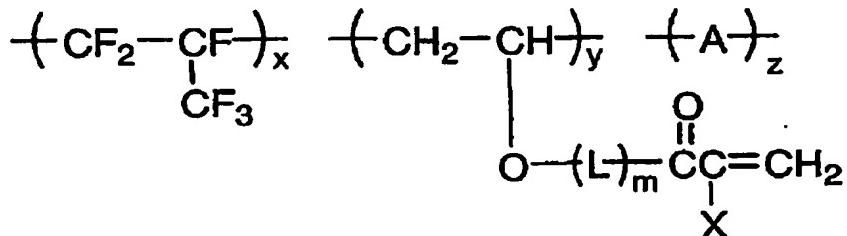
65. (New) An antireflection film comprising:
a transparent support; and
a low-refractive index layer having a lower refractive index than the transparent support,
wherein the low-refractive index layer is an outermost layer of the antireflection film, and the
low-refractive index layer comprises: a hollow silica particle; and a binder capable of lowering a
surface free energy of the antireflection film,
wherein the surface free energy is at most 25 mN/m.

66. (New) The antireflection film as claimed in claim 65, wherein the binder
comprises at least one of a silicone and a fluorine.

67. (New) The antireflection film as claimed in claim 65, wherein the binder is a
fluorine-containing polymer.

68. (New) The antireflection film as claimed in claim 65, wherein the binder is a
compound having a (meth)acryloyl group.

69. (New) The antireflection film as claimed in claim 65, wherein the binder is a
compound represented by formula (1):



wherein L represents a linking group having from 1 to 10 carbon atoms; X represents a hydrogen atom or a methyl group; A represents a repetitive unit derived from a vinyl monomer;

$2 \leq m \leq 10$; and x, y and z each indicates mol% of the respective repetitive unit, and satisfy $30 \leq x \leq 60$, $5 \leq y \leq 70$ and $0 \leq z \leq 65$.